**Digital Research and Innovation**

The visual notes have been created within a template which utilises the University of Liverpool’s ‘Making an Impact 2022’ and the Academy’s colour schemes of dark purple, a golden orange and accents of pink, green and blue. The bottom of the note includes a colourful banner incorporating the Making an Impact 2022 visual which includes bright colourful triangles. The Academy which has a purple background and a colourful pyramid of stripes. A second Academy banner focussed on Researcher Development which has a white banner with an image made up of four colourful petals (purple, pink, green and orange) It states “positive and inclusive research culture”. The final banner is the logo of the University of Liverpool featuring a blue shield with three doves and a book in the centre.  Underneath this runs the social media information:

www.liverpool.ac.uk/researcher/making-impact

#unilivimpact22

@LivResearcher

@LivUniAcademy

And the words “illustrated by @swantonsketches”

The title of the podcast “Digital Research and Innovation” is presented in the top banner which also includes a drawing of a radio microphone with waves coming out representing the podcast format.

Underneath this are three purple monochrome portraits of the podcast participants. On the left is Anthony Mtitimilia, Senior Partnerships and Innovation Manager at the University of Liverpool. The second portrait represents Professor Daniel Arribas-Bel, Professor in Geographic Data Science at the University of Liverpool. The third portrait is of Andre Borland, Head of Commercial Virtual Engineering Centre at the University of Liverpool.  The podcast content is visualised in the space below these portraits.

On the left hand side is an orange speech bubble shape. Inside are the words “What does a resilient city look like?” The speech bubble is coming from a simplified drawing representing a city. It is drawn in green and features tall buildings, trees, wind-turbines to represent renewable power and recycling facilities. There is a modernistic mono-rail and bicycles.  Underneath the city drawing are the words “build on existing strength”.

To the right of this image are drawings of three puzzle shapes. The top one is green and represents industry; the second in purple and represents universities; the third one is orange and represents the Government. These puzzle pieces are linked to the city drawing by the words “Shaped in collaboration – different perspectives are essential”.

To the right of the puzzles are the words “To get the pieces to fit together you need:-

* To recognise the challenge
* Shared goals
* Open communication

To the right of this a speech bubble is drawn from Prof Arribas-Bel’s portrait which states “Cities are always evolving…” Underneath this are the words “need to take a global view to best inform the local context of our cities” In small writing to the right pointing to an image of the globe are the words “Examples… Copenhagen increasing sustainability in a medieval city”

Back on the left hand side underneath the city image is a drawing of a large green arrow pointing right and into an orange silhouette of a figure with their arms back looking left. The writing in and around the arrow states “technology-enabled society 5.0 responsive and smart cities” The words “data” and “sustainable” are also included in the drawing. The human figure has been drawn to represent the concept of human centric cities.

Coming from the human figure is a speech bubble which reads “How do you factor in all voices?”

Underneath is a drawing in orange containing nine stick people representing different lifestages (babyhood, childhood; young adulthood; parenthood; and older age). Written under this “recognise that the needs for the city vary over lifecycles” and arrow points from this to a drawing of a chameleon and the words “Requires a pliable, adaptable and resilient framework to future-proof the city” a connector joins this to “embed into policy” which in turn leads to “informs decision-making and planning”

To the right of the chameleon is a drawing of a city silhouette the left half of the city is orange, the second half is the image repeated but with a darker grid texture – it represents the city’s digital twin. Above the city is a thought bubble containing the words “Nurture a fertile environment for innovation (we do not know what innovation will look like)”. The digital twin can be informed by academic underpinning and offers an opportunity for simulation and experimentation to inform decision making and planning.  These words are provided underneath the drawing.